



## **ENVIRONMENTAL PROTECTION AGENCY**

### **40 CFR Part 52**

**[EPA-R08-OAR-2015-0670; FRL-9937-26-Region 8]**

#### **Approval and Promulgation of Air Quality Implementation Plans; 2008 Ozone NAAQS Interstate Transport for Colorado, Montana, North Dakota and South Dakota**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Proposed rule.

**SUMMARY:** The Environmental Protection Agency (EPA) is proposing to approve State Implementation Plan (SIP) submissions from the states of Colorado, Montana, North Dakota and South Dakota that are intended to demonstrate that the SIP for each respective state meets certain interstate transport requirements of the Clean Air Act (Act or CAA) for the 2008 8-hour ozone National Ambient Air Quality Standards (NAAQS). These submissions address the requirement that each SIP contain adequate provisions prohibiting air emissions that will have certain adverse air quality effects in other states. The EPA is proposing to approve these SIPs for all four states as containing adequate provisions to ensure that air emissions in the states do not significantly contribute to nonattainment or interfere with maintenance of the 2008 8-hour ozone NAAQS in any other state.

**DATES:** Comments must be received on or before **[Insert date 30 days after publication in the Federal Register]**.

**ADDRESSES:** The EPA has established a docket for this action under Docket Identification

Number EPA-R08-OAR-2015-0670. All documents in the docket are listed on the <http://www.regulations.gov> web site. Although listed in the index, some information may not be publicly available, *i.e.*, Confidential Business Information or other information the disclosure of which is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in the hard copy form. Publicly available docket materials are available either electronically through <http://www.regulations.gov> or in hard copy at EPA Region 8, Office of Partnership and Regulatory Assistance, Air Program, 1595 Wynkoop Street, Denver, Colorado, 80202-1129. The EPA requests that you contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section to view the hard copy of the docket. The Regional Office's official hours of business are Monday through Friday, 8:00 a.m. - 4:00 p.m., excluding federal holidays. An electronic copy of the state's SIP compilation is also available at <http://www.epa.gov/region8/air/sip.html>.

**FOR FURTHER INFORMATION CONTACT:** Adam Clark, Air Program, U.S.

Environmental Protection Agency, Region 8, Mailcode 8P-AR, 1595 Wynkoop, Denver, Colorado 80202-1129, (303) 312-7104, [clark.adam@epa.gov](mailto:clark.adam@epa.gov).

**SUPPLEMENTARY INFORMATION:**

**I. General Information**

What should I consider as I prepare my comments for the EPA?

1. Submitting Confidential Business Information (CBI). Do not submit CBI to the EPA through [www.regulations.gov](http://www.regulations.gov) or email. Clearly mark the part or all of the information that you claim to be CBI. For CBI information in a disk or CD ROM that you mail to the EPA, mark the outside of the disk or CD ROM as CBI and then identify electronically within the disk or CD

ROM the specific information that is claimed as CBI. In addition to one complete version of the comment that includes information claimed as CBI, a copy of the comment that does not contain the information claimed as CBI must be submitted for inclusion in the public docket. Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2.

2. Tips for Preparing Your Comments. When submitting comments, remember to:

- Identify the rulemaking by docket number and other identifying information (subject heading, Federal Register date and page number).
- Follow directions - The agency may ask you to respond to specific questions or organize comments by referencing a Code of Federal Regulations (CFR) part or section number.
- Explain why you agree or disagree; suggest alternatives and substitute language for your requested changes.
- Describe any assumptions and provide any technical information and/or data that you used.
- If you estimate potential costs or burdens, explain how you arrived at your estimate in sufficient detail to allow for it to be reproduced.
- Provide specific examples to illustrate your concerns and suggest alternatives.
- Explain your views as clearly as possible, avoiding the use of profanity or personal threats.
- Make sure to submit your comments by the comment period deadline identified.

## **II. Background**

On March 12, 2008, the EPA revised the levels of the primary and secondary 8-hour

ozone standards from 0.08 parts per million (ppm) to 0.075 ppm (73 FR 16436). The CAA requires states to submit, within three years after promulgation of a new or revised standard, SIPs meeting the applicable “infrastructure” elements of sections 110(a)(1) and (2). One of these applicable infrastructure elements, CAA section 110(a)(2)(D)(i), requires SIPs to contain “good neighbor” provisions to prohibit certain adverse air quality effects on neighboring states due to interstate transport of pollution. There are four sub-elements within CAA section 110(a)(2)(D)(i). This action addresses the first two sub-elements of the good neighbor provisions, at CAA section 110(a)(2)(D)(i)(I). These sub-elements require that each SIP for a new or revised standard contain adequate provisions to prohibit any source or other type of emissions activity within the state from emitting air pollutants that will “contribute significantly to nonattainment” or “interfere with maintenance” of the applicable air quality standard in any other state. We note that the EPA has addressed the interstate transport requirements of CAA section 110(a)(2)(D)(i)(I) for the eastern portion of the United States in several past regulatory actions.<sup>1</sup> We most recently promulgated the Cross-State Air Pollution Rule (CSAPR), which addressed CAA section 110(a)(2)(D)(i)(I) in the eastern portion of the United States.<sup>2</sup> CSAPR addressed multiple NAAQS, but did not address the 2008 8-hour ozone standard.<sup>3</sup>

In CSAPR, the EPA used detailed air quality analyses to determine whether an eastern state’s contribution to downwind air quality problems was at or above specific thresholds. If a state’s contribution did not exceed the specified air quality screening threshold, the state was not

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1. NO<sub>x</sub> SIP Call, 63 FR 57371 (October 27, 1998); Clean Air Interstate Rule (CAIR), 70 FR 25172 (May 12, 2005); Cross-State Air Pollution Rule (CSAPR), 76 FR 48208 (August 8, 2011).

2. 76 FR 48208.

3. CSAPR addressed the 1997 8-hour ozone, and the 1997 and 2006 fine particulate matter NAAQS.

considered “linked” to identified downwind nonattainment and maintenance receptors and was therefore not considered to significantly contribute or interfere with maintenance of the standard in those downwind areas. If a state exceeded that threshold, the state’s emissions were further evaluated, taking into account both air quality and cost considerations, to determine what, if any, emissions reductions might be necessary. For the reasons stated below, we believe it is appropriate to use the same approach we used in CSAPR to establish an air quality screening threshold for the evaluation of interstate transport requirements for the 2008 8-hour ozone standard.<sup>4</sup>

In CSAPR, the EPA proposed an air quality screening threshold of one percent of the applicable NAAQS and requested comment on whether one percent was appropriate.<sup>5</sup> The EPA evaluated the comments received and ultimately determined that one percent was an appropriately low threshold because there were important, even if relatively small, contributions to identified nonattainment and maintenance receptors from multiple upwind states. In response to commenters who advocated a higher or lower threshold than one percent, the EPA compiled the contribution modeling results for CSAPR to analyze the impact of different possible thresholds for the eastern United States. The EPA’s analysis showed that the one-percent threshold captures a high percentage of the total pollution transport affecting downwind states, while the use of higher thresholds would exclude increasingly larger percentages of total transport. For example, at a five percent threshold, the majority of interstate pollution transport

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4. Note that EPA has not done an assessment to determine the applicability of the one-percent screening threshold for western states that contribute above the one percent threshold. There may be additional considerations that may impact regulatory decisions regarding potential linkages in the west identified by the modeling.

5. 75 FR 45210, 45237 (August 2, 2010).

affecting downwind receptors would be excluded.<sup>6</sup> In addition, the EPA determined that it was important to use a relatively lower one-percent threshold because there are adverse health impacts associated with ambient ozone even at low levels.<sup>7</sup> The EPA also determined that a lower threshold such as 0.5 percent would result in relatively modest increases in the overall percentages of fine particulate matter and ozone pollution transport captured relative to the amounts captured at the one-percent level. The EPA determined that a “0.5 percent threshold could lead to emission reduction responsibilities in additional states that individually have a very small impact on those receptors — an indicator that emission controls in those states are likely to have a smaller air quality impact at the downwind receptor. We are not convinced that selecting a threshold below one percent is necessary or desirable.”<sup>8</sup>

In the final CSAPR, the EPA determined that one percent was a reasonable choice considering the combined downwind impact of multiple upwind states in the eastern United States, the health effects of low levels of fine particulate matter and ozone pollution, and the EPA’s previous use of a one-percent threshold in CAIR. The EPA used a single “bright line” air quality threshold equal to one percent of the 1997 8-hour ozone standard, or 0.08 ppm.<sup>9</sup> The projected contribution from each state was averaged over multiple days with projected high modeled ozone, and then compared to the one-percent threshold. We concluded that this approach for setting and applying the air quality threshold for ozone was appropriate because it

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6. *See also* Air Quality Modeling Final Rule Technical Support Document, Appendix F, Analysis of Contribution Thresholds.

7. 76 FR 48208, 48236–37

8. *Id.*

9. *Id.*

provided a robust metric, was consistent with the approach for fine particulate matter used in CSAPR, and because it took into account, and would be applicable to, any future ozone standards below 0.08 ppm.<sup>10</sup>

### **III. EPA's Analysis**

On August 4, 2015, the EPA issued a Notice of Data Availability (NODA) containing air quality modeling data that applies the CSAPR approach to contribution projections for the year 2017 for the 2008 8-hour ozone NAAQS.<sup>11</sup> The moderate area attainment date for the 2008 ozone standard is July 11, 2018. In order to demonstrate attainment by this attainment deadline, states will use 2015 through 2017 ambient ozone data. Therefore, 2017 is an appropriate future year to model for the purpose of examining interstate transport for the 2008 8-hour ozone NAAQS. The EPA used photochemical air quality modeling to project ozone concentrations at air quality monitoring sites to 2017 and estimated state-by-state ozone contributions to those 2017 concentrations. This modeling used the Comprehensive Air Quality Model with Extensions (CAMx version 6.11) to model the 2011 base year, and the 2017 future base case emissions scenarios to identify projected nonattainment and maintenance sites with respect to the 2008 8-hour ozone NAAQS in 2017. The EPA used nationwide state-level ozone source apportionment modeling (CAMx Ozone Source Apportionment Technology/Anthropogenic Precursor Culpability Analysis technique) to quantify the contribution of 2017 base case nitrogen oxides (NO<sub>x</sub>) and volatile organic compounds (VOC) emissions from all sources in each state to the

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10. Id.

11. See 80 FR 46271 (August 4, 2015) (Notice of Availability of the Environmental protection Agency's Updated Ozone Transport Modeling Data for the 2008 Ozone National Ambient Air Quality Standard (NAAQS))

2017 projected receptors. The air quality model runs were performed for a modeling domain that covers the 48 contiguous United States and adjacent portions of Canada and Mexico. The NODA and the supporting technical support documents have been included in the docket for this SIP action.

The modeling data released in the August 4, 2015 NODA is the most up-to-date information the EPA has developed to inform our analysis of upwind state linkages to downwind air quality problems. For purposes of evaluating these four states' interstate transport SIPs with respect to the 2008 8-hour ozone standard, the EPA is proposing that states whose contributions are less than one percent to downwind nonattainment and maintenance receptors are considered non-significant.

The modeling indicates that the relevant contributions from Colorado, Montana, North Dakota, and South Dakota are all below the one-percent screening threshold of 0.75 ppb.<sup>12</sup> Colorado's largest contribution to any projected downwind nonattainment site is 0.36 ppb, and its largest contribution to any projected downwind maintenance-only site is 0.34 ppb. Montana's largest contribution to any projected downwind nonattainment site is 0.15 ppb, and its largest contribution to any projected downwind maintenance-only site is 0.17 ppb. North Dakota's largest contribution to any projected downwind nonattainment site is 0.14 ppb, and its largest contribution to any projected downwind maintenance-only site is 0.28 ppb. South Dakota's largest contribution to any projected downwind nonattainment site is 0.08 ppb, and its largest contribution to any projected downwind maintenance-only site is 0.12 ppb. These values are all

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12. Id. at 46276, Table 3.



below the one-percent screening threshold of 0.75 ppb, and therefore there are no identified linkages between any of these four respective states and 2017 downwind projected nonattainment and maintenance sites.

#### **IV. State Submissions and EPA's Assessment**

Each of the four states addressed in this proposed rulemaking made a submission certifying the adequacy of their existing SIP to implement the 2008 8-hour ozone NAAQS. Colorado submitted its certification on December 31, 2012; Montana submitted its certification on January 3, 2013; North Dakota submitted its certification on March 8, 2013; and South Dakota submitted its certification on May 30, 2013. All of these 2008 ozone infrastructure SIPs are included in the docket for this action. Each submission included an analysis of the respective SIP's adequacy with regard to the interstate transport requirements of section 110(a)(2)(D)(i)(I).

##### **A. Colorado**

In its December 31, 2012 submission, the State of Colorado concluded that it did not significantly contribute to nonattainment or interfere with maintenance in other states with respect to the 2008 8-hour ozone NAAQS. Colorado based this conclusion on the distance from the state to downwind 2008 ozone nonattainment areas and the overall decrease in ozone emissions within Colorado. The EPA has determined that distance is a relevant factor for an interstate transport technical analysis because pollutant dispersion increases as distance increases.<sup>13</sup> Colorado did not provide a detailed analysis supporting its conclusion, including any

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13. Memorandum from William T. Harnett entitled "Guidance on SIP Elements Required Under Sections 110(a)(1) and (2) for the 2006 24-Hour Fine Particle (PM<sub>2.5</sub>) National Ambient Air Quality Standards (NAAQS)," September 25, 2009.

quantification of the distance to other nonattainment areas or the amount of ozone emission reductions within the state and over what timeframe. Moreover, Colorado suggests that it need not perform a more detailed technical analysis until the EPA provides guidance specific to the development of SIPs to address interstate transport as to the 2008 ozone NAAQS. As the Supreme Court recently affirmed in *EPA v. EME Homer City Generation, L.P.*, the EPA is not obligated to provide any information, guidance, or specific metrics before a state must undertake to fulfill its obligation to address interstate transport in its SIP. 134 S.Ct. 1584, 1601 (2014).

Despite the state's incomplete technical analysis, the modeling released in the EPA's August 4, 2015 NODA confirms Colorado's conclusion that the State does not significantly contribute to nonattainment or interfere with maintenance of the 2008 ozone standard in any other state.<sup>14</sup> Based on the modeling data and the information provided in Colorado's submission, we are proposing to approve Colorado's SIP as meeting the CAA section 110(a)(2)(D)(i)(I) requirements for the 2008 8-hour ozone standard.

## **B. Montana**

In its January 3, 2013 submission, the State of Montana concluded that it did not significantly contribute to nonattainment or interfere with maintenance in other states with respect to the 2008 8-hour ozone NAAQS. Montana based this conclusion on the existing permitting programs to which current and future Montana ozone sources are subject, as well as certain federal requirements such as applicable maximum achievable control technology (MACT) and new source performance standard (NSPS) requirements. While Montana did not

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14. Id.

provide information or analysis explaining why the existing permitting programs support their conclusion that emissions from within the state do not contribute to downwind air quality problems, and the EPA does not agree that permitting programs alone are necessarily sufficient to show non-contribution or non-interference at a level that satisfies 110(a)(2)(D)(i)(I), the EPA concurs with Montana's overall conclusion that the State does not significantly contribute to nonattainment or interfere with maintenance of the 2008 8-hour ozone NAAQS in any other state based on the EPA's modeling data from the August 4, 2015 NODA.<sup>15</sup> Based on that modeling data, we are proposing to approve Montana's SIP as meeting the CAA section 110(a)(2)(D)(i)(I) requirements for the 2008 ozone NAAQS.

### **C. North Dakota**

In its March 8, 2013 submission, the State of North Dakota concluded that it did not significantly contribute to nonattainment or interfere with maintenance in other states with respect to the 2008 8-hour ozone NAAQS. North Dakota based this conclusion in part on the results of the modeling conducted for CSAPR, which included analysis of North Dakota's downwind contributions for ozone (for the 1997 ozone NAAQS). North Dakota noted that the CSAPR modeling predicted the State's largest contribution to any projected downwind nonattainment site to be 0.2 ppb, and the largest contribution to any projected downwind maintenance-only site to be 0.1 ppb. As further evidence that North Dakota neither contributes significantly to nonattainment nor interferes with maintenance in other states, the State noted that its point-source NO<sub>x</sub> emissions were "steadily declining" between 2002 and 2011, with more

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<sup>15</sup> Id.

reductions expected as a result of regional haze actions.

The EPA notes that the modeling North Dakota relies upon was conducted by the EPA in 2011, for purposes of evaluating upwind state contributions and downwind air quality problems as to a prior, less-stringent ozone NAAQS, and that the modeling evaluated a 2012 compliance year. Accordingly, the fact that this modeling showed downwind contribution less than one percent of the 2008 ozone NAAQS is not necessarily dispositive of North Dakota's obligations under section 110(a)(2)(D)(i)(I). However, as discussed above, the EPA has conducted more updated modeling subsequent to the State's SIP submission that confirms the underlying conclusion of our 2011 modeling, and of North Dakota's SIP submission: North Dakota does not significantly contribute to nonattainment or interfere with maintenance of the 2008 8-hour ozone standard in any other state. Accordingly, we are proposing to approve North Dakota's SIP as meeting the CAA section 110(a)(2)(D)(i)(I) requirements for the 2008 8-hour ozone standard.

#### **D. South Dakota**

In its May 30, 2013 submission, the State of South Dakota concluded that it did not significantly contribute to nonattainment or interfere with maintenance in other states with respect to the 2008 8-hour ozone NAAQS. The State explained that its conclusion was "based on South Dakota's emissions inventory," and provided further supporting information in an attachment including (1) demographic and geographic data; (2) an inventory of emissions and locational data on 85 major Title V sources within South Dakota that "potentially could impact air quality in neighboring states";<sup>16</sup> (3) topographical, distance, and meteorological information

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16. The State provided emissions inventories for seven such potentially impacted "neighboring states"—North

(including windrose graphs); and (4) explanations for why this information suggests that the impact of South Dakota's emissions on four nearby nonattainment areas is minimal.<sup>17</sup> Separately, South Dakota noted plans to install controls to reduce NOx emissions by 70 percent from the largest source of ozone-forming pollution in the State (Otter Tail's Big Stone power plant),<sup>18</sup> as well as plans to install controls on Black Hills Power's Ben French facility, the State's third highest emitter of NOx at the time of the submission.

The EPA notes that South Dakota's analysis focuses solely on potential impacts to the designated nonattainment areas closest to South Dakota, and does not appear to address the potential for either significant contribution to nonattainment areas located further away, or interference with any maintenance of the standard in areas that might currently be in attainment. Even if a state does not significantly contribute to the most physically proximate nonattainment areas, other factors may cause emissions from the state to affect nonattainment areas that are farther away. Furthermore, because prong 1 and 2 concern air-quality impacts in different areas, even a state that does not significantly contribute to nonattainment may still interfere with maintenance of the standard in areas currently attaining. Nonetheless, as discussed above, the modeling in the EPA's NODA confirms South Dakota's underlying conclusion that the State does not significantly contribute to nonattainment or interfere with maintenance of the 2008 ozone standard in any other state. Based on this modeling data and the information and analysis

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Dakota, Minnesota, Iowa, Nebraska, Colorado, Wyoming, and Montana.

17. Specifically, the State's submission discussed potential impacts on (1) Sublette County, Wyoming (the only nonattainment area in a State bordering South Dakota); (2) northeastern Colorado (the "closest ozone nonattainment area to South Dakota"); and (3) Sheyboygan County, Wisconsin and Chicago, Illinois (the "nonattainment areas . . . closest to the east side of South Dakota").

18. The EPA notes that these controls have been installed in the time since South Dakota made this submission.

provided in South Dakota's submission, we are proposing to approve South Dakota's SIP as meeting the CAA section 110(a)(2)(D)(i)(I) requirements for the 2008 8-hour ozone standard.

## **V. Proposed Action**

The EPA is proposing to approve the following submittals as meeting the interstate transport requirements of CAA section 110(a)(2)(D)(i)(I) for the 2008 8-hour ozone NAAQS: Colorado's December 31, 2012 submission; Montana's January 3, 2013 submission; North Dakota's March 8, 2013 submission; and South Dakota's May 30, 2013 submission. The EPA is proposing this approval based on the information and analysis provided by each state, as well as the modeling in EPA's August 4, 2015 NODA that confirms each state's conclusion that its SIP contains adequate provisions to ensure that in-state air emissions will not contribute significantly to nonattainment or interfere with maintenance of the 2008 ozone NAAQS in any other state. This action is being taken under section 110 of the CAA.

## **VI. Statutory and Executive Order Reviews**

Under the Clean Air Act, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, the EPA's role is to approve state actions, provided that they meet the criteria of the Clean Air Act. Accordingly, this proposed action merely approves state law provisions as meeting federal requirements and does not propose additional requirements beyond those imposed by state law. For that reason, this action:

- Is not a significant regulatory action subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- Does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the Clean Air Act; and

- Does not provide the EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, the SIP does not apply on any Indian reservation land or in any other area where the EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. In those areas of Indian country, the proposed rule does not have tribal implications and will not impose substantial direct costs on tribal governments or preempt tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000).

**List of Subjects in 40 CFR Part 52**

Environmental protection, Air pollution control, Carbon monoxide, Incorporation by reference, Intergovernmental relations, Lead, Nitrogen dioxide, Ozone, Particulate matter, Reporting and recordkeeping requirements, Sulfur oxides, Volatile organic compounds.

**Authority:** 42 U.S.C. 7401 *et seq.*

Dated: November 10, 2015.

Shaun L. McGrath,  
Regional Administrator,  
Region 8.